Date Out: 7/29/93 (8-2-93)

Chemical Code:108801
DP Barcode:D191052

ENVIRONMENTAL FATE AND GROUND WATER BRANCH

Review Action

To: Walter Waldrop, PM # 71
Special Review and Reregistration Division (H7508W)

From: David Wells, Acting Section Head
Ground Water Technology Section
Environmental Fate & Ground Water Branch/EFED (H7507C)

Thru: Henry Jacoby, Chief
Environmental Fate & Ground Water Branch/EFED (H7507C) Henry Jacoby 8/2/93

Attached, please find the EFGWB review of...

Common Name:	Metolachlor	Trade name:	Dual, Medal
Company Name:	CIBA-GEIGY Corporation		
ID #:			
Purpose:	Review Rebuttal to EFGWB Review of Large-Scale Retrospective Ground-Water Study		

Type Product:	Action Code:	EFGWB #(s):	Review Time:
Herbicide	001	93-0708	1 day

STATUS OF STUDIES IN THIS PACKAGE:

Guideline #	MRID	Status[1]
None	427491-01	-

STATUS OF DATA REQUIREMENTS ADDRESSED IN THIS PACKAGE:

Guideline #	Status[2]
166-2	S

[1]Study Status Codes: A = Acceptable U = Upgradeable C = Ancillary I = Invalid.
[2]Data Requirement Status Codes: S = Satisfied P = Partially satisfied N = Not satisfied R = Reserved W = Waived.

1. CHEMICAL:

Chemical name: 2-Chloro-N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl)acetamide

Common name: Metolachlor
Trade names: Dual and Medal
Structure:

2. TEST MATERIAL:

Metolachlor

3. STUDY/ACTION TYPE

Review of response to EFGWB review of large-scale retrospective ground-water monitoring study.

4. STUDY IDENTIFICATION:

Title: Response to the EPA Review of the Large-Scale Retrospective Ground-Water Monitoring Study for Metolachlor in Four States (Georgia, Illinois, Iowa and Wisconsin) - EPA MRID No. 412846-01

Author: Dr. K Balu
CIBA-GEIGY Corporation
P.O. Box 18300
Greensboro, NC 27419

5. REVIEWED BY: Kevin Costello, Hydrologist
OPP/EFED/EFGWB/Ground-Water Technology Section

Signature: Kevin J Costello

Date: 7/29/93

6. APPROVED BY: David Wells, Acting Section Chief
OPP/EFED/EFGWB/Ground-Water Section

Signature: David A Wells

Date: 7/29/93

7. CONCLUSIONS:

Subsequent to the preparation of this response to EFGWB's review of the final report of the large-scale retrospective ground-water study for metolachlor, CIBA-GEIGY (Ciba) reconsidered its stated position, and concurred with EFGWB that small-scale prospective studies would better evaluate the ground-water leaching potential of the herbicide. Ciba formally presented this position to members of the Ground Water Section, and of the Special Review and Reregistration Division, in a meeting on July 12, 1993. The details of the proposed prospective studies will be negotiated by Ciba and EFGWB at a later date, commencing with Ciba's submission of a draft protocol.

Although this development eliminates the need to comment on Ciba's arguments in this report on why prospective studies for metolachlor are unnecessary, the are other aspects of the report that require a response:

1) EFGWB accepts Ciba's assertion that the company did not purposely select wells obviously contaminated by a point source of metolachlor, except in the cases specifically indicated. The problems Ciba encountered in definitively ascertaining the history of potential point sources for candidate wells are now being recognized as an inherent risk with large-scale retrospective studies. This is one major reason for requiring further data from a prospective study.

2) The fact that there are greater than 200 well samples with low or no detections of metolachlor does not justify discounting the samples with higher concentrations because a point source cannot be ruled out. Many of the wells described as contaminated by "potential point sources" were closer to the treated field than the suspected point source. In addition, none of the wells in question were actually shown to be hydrologically downgradient of the suspected point sources. Even the most likely evidence of point-source contamination given is vague and anecdotal, such as a "smell of pesticides," or unconfirmed past backsiphoning events. Doubts about metolachlor use history does not make the detections insignificant, but does limit the samples' usefulness in definitively evaluating the metolachlor's leaching potential.

3) EFGWB agrees that it is not appropriate to use the Pesticides in Ground Water Database (PGWDB) to evaluate whether a pesticide will leach through soil to the water table through normal agricultural use. The data in the PGWDB is not presented in a way that allows the user to distinguish between point source and non-point source contamination.

4) Since the leaching potential of metolachlor should be more clearly established through the performance of the forthcoming

small-scale prospective ground water monitoring studies, EFGWB will not recommend that the metolachlor label be revised to restrict its use on sandy soils at this time. Such a recommendation was included in EFGWB's initial review of the large-scale retrospective study.

8. RECOMMENDATIONS:

As stated in EFGWB's initial review, metolachlor meets the triggers for classification as a restricted use compound based on ground-water concerns. The metolachlor label should be revised to include this classification.